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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/043,902

01/11/2002

Zvi H. Meiksin

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02/02/2004

BAKER & MCKENZIE

805 THIRD AVENUE

NEW YORK, NY 10022

EXAMINER

NGUYEN, THUAN T

ART UNIT

PAPER NUMBER

2685

DATE MAILED: 02/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/043,902

Applicant(s)

MEIKSIN ET AL.

Examiner

THUAN T. NGUYEN

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2685

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 76-95 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 76-95 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 76-95 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 76-95 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rider (U.S. Patent No. 5,264,795) in view of Schneider et al. (US Patent 4,262,171).

Regarding claims 76-95, for at least the unpatentable of independent claim 76, Rider discloses a communication system for communicating between a surface and an underground system, wherein a transmitter at the first system comprises amplifiers coupled to an antenna(s) for amplifying received signals before outputting the signals to the antenna 190 (Fig. 6 & Fig. 8 for internal circuitry of output circuit 170) and a series of capacitor are used for reducing impedance of the antenna (Fig. 11, and col. 9/lines 54 to col. 10/line 2); the output signals then are coupled by magnetic flux linkage or magnetic

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field 32 to another antenna of a second system, i.e., a receiving system 220 with antennas 501, 502, 503 with a carrier signal addressed (see Fig. 5, and col. 8/line 50 to col. 9/line 53).

Rider does not clearly point out to include "a modulator for modulating a single sideband carrier signal"; however, Rider inherently suggests including that modulator since a transmitter has means for modulating a signal and providing the modulated output carrier signal whereas the carrier signal regarding as a single sideband carrier signal for the system (col. 8/lines 4-47). In addition, it is known in the art that in mine environment, a modulator with single sideband technique (SSB) is commonly used. Eventually, Schneider teaches an exact same technique for communication system within a mine environment that users can communicate to each other using computer stations equipped with transceivers having modulators using SSB transmission technique (see Fig. 1, and col. 2/line 50 to col. 3/line 36; and Fig. 2A/item 56 for a modulator, and col. 3/line 36 to col. 4/line 39 for concerned issues). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Rider's system with a well-known modulator using SSB as taught by Schneider in order to modulating a single sideband carrier signal of the transmitter as desired as suggested by Rider and taught by Schneider. Other claims are unpatentable based at least on this reason of claim 76.

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Conclusion

4. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

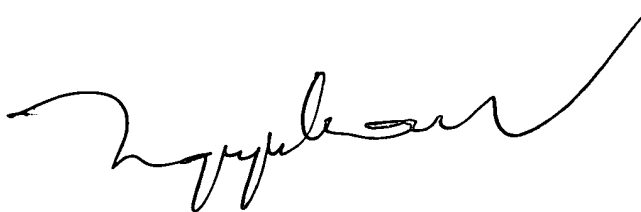
(703) 872-9306, (for Technology Center 2600 only)

*Hand-delivered responses should be brought to Crystal Park II,
2121 Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).*

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tony Thuan Nguyen whose telephone number is (703) 308-5860. The examiner can normally be reached on Monday-Friday from 9:30 AM to 7:00 PM, with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban, can be reached at (703) 305-4385.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the **Technology Center 2600 Customer Service Office** whose telephone number is **(703) 306-0377**.



**TONY T. NGUYEN
PATENT EXAMINER**

Tony T. Nguyen
Art Unit 2685
January 21, 2004